# **Overview**

Name of Method	[Challenge Map]
Type/Level of Method (FF)	□overall approach  x method □ tool
Brief description	[Challenge mapping helps to understand the barriers to innovation within a certain thematic area / challenge / societal mission and to indicate the most promising routes towards overcoming the barriers. The challenge map is a tool to engage with a certain community of experts to build this understanding and discuss the routes towards solutions. A ready challenge map provides a good overview of how different aspects are interconnected and where the 'sore points' are vs. what can 'the cure' consists of.]
Keywords (FF)	LEAVE BLANK

## **Barriers and Issues**

Relevance to Climate	[was the method developed for or is it known to be suited to dealing with climate neutrality and how]
Neutrality (FF)	$\square$ Developed specifically to deal with climate challenges
reactancy (11)	☐ Has been implemented to deal with climate challenges
	X Has potential to deal with climate challenges
	[Which challenges can this method help to address, from
	here, further development needed]
	$\square$ Financial limitations <i>eg. Insufficient resources</i>
	☐Specific climate-related challenges <i>eg. City industry or</i>
	location
	$\square$ Resistance to climate action from vested interests <i>eg.</i>
	Previous initiatives met with resistance from powerful actors
	$\square$ Resistance to climate action from public <i>eg. Previous</i>
	initiatives met with public backlash
	$\square$ Short term thinking <i>eg. Difficulty in policy planning beyond</i>
Challenges (FF and text)*	election cycle
	X Existing governance structures eg. Existing setup makes
	collaboration across departments difficult, siloed governance
	☐ Historical legacies and institutional distrust <i>eg. Low public</i>
	trust in city govt
	☐ Inadequate public participation <i>eg. Low capacity to</i>
	conduct meaningful citizen engagement
	☐Inadequate representation of affected communities eg.
	Those affected by action are not well represented
	by/connected to existing elected officials





	$\square$ Poor existing services <i>eg. The current offer does not align</i>
	with policy directives (limiting its access to government
	support) or with user demands (in terms of
	output/delivery/etc.)
	$\square$ Marginalized from innovation ecosystem <i>eg. Detached</i>
	from innovation hubs (rural location etc.); limited
	understanding of system actors and resources; etc.
	$\square$ Scaling challenges <i>eg. Finding people with a suitable set of</i>
	skills and competences and dealing with specific local
	challenges/contexts
	x Other [Narrow definition or inadequate overview of the
	problem to be addressed]
	TEXT: [Challenge mapping can help to make a broad
	overview of a complex problem setting. Thereby it can show
	how a certain challenge extends its reach across sectoral and
	organisational borders and can thereby require both
	punctual and systemic interventions and even a certain
	sequencing of them.]
	[is this method well suited to use in a particular sector OR
	has this method been used in any of the following sectors or
	to address the following themes]
	☐ Urban Governance, Policy Development, CCC
	X Innovation Management and Digitization
	X Stakeholder/ Community engagement and capacity
	building
	☐ Financing, Funding and Partnerships
	X Peer to peer learning, and replication, upscaling
	☐Built environment <i>eg. Building renovations</i>
Thematic Areas (FF)*	☐ Energy systems eg. Energy generation
	☐ Mobility and transport <i>eg. Public transport, bikes</i>
	Green industry eg. Environmentally friendly
	manufacturing or agriculture
	$\square$ Circular economy eg. Initiatives to eliminate waste or reuse materials
	$\square$ Nature-based solutions <i>eg. Green roofs, ecological</i>
	restoration
	☐ Digital solutions <i>eg. Engaging citizens through data</i>
	platforms
	□Not applicable
	☐Other [text box]
	[The main aim of a challenge map is to support
Problem, Purpose and	conversations with experts that have understanding about a
Needs (text)	complex challenge and could potentially contribute to
	finding solutions that overcome the identified barriers.



Impact Goals (FF)	[does this method typically aim towards long or short term goals]  □ short term  x medium term □ long term □ Not applicable/other
Issue Complexity (FF)	[what level of complexity can this method handle?]  low  medium
Issue Polarisation (FF)	x high [what level of polarisation is this method capable of dealing with?] □low x medium □high

## **Governance and Empowerment**

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Governance Models and Approaches (FF)	[what overall approach to governance or methodology does this method fit into?]  OPTIONS SUBJECT TO CHANGE  X co-creation eg. Development of new or added value through collaboration with affected stakeholders  co-design eg. Collaborative and participatory design and development processes with affected stakeholders  co-production eg. People using the service are involved in design and implementation  X systems thinking eg. Approaches specifically designed to effect systemic change  collaborative governance eg. Affected stakeholders and communities working together on a problem  deliberative approaches eg. Structured dialogic processes  partnership approaches eg. Long term partnerships that challenge traditional boundaries  evaluation, oversight and monitoring eg. Holding authorities to account  X Social innovation approaches eg. Approaches that aim to fulfil a social need
Enabling Conditions (FF)	[which enabling conditions does this method or tool support]:  ☐ Organizational processes ☐ Organizational culture



	☐ Organizational structure
	x Network Mapping
	X Network Collaboration
	$\square$ Context fit (ie. Ability to be embedded in the
	local/regional/national/etc. level)
	☐ Access to markets
	☐ Access to finance
	☐ Access to training, education and research
	☐ Knowledge development and transfer
	·
	☐ Political and administrative awareness
	□Leadership
	☐ Organizational vision
	□Other [text box]
Essential Considerations for	
Commissioning Authorities	N/A
(text)	,
	[at what stage/s in a city's engagement journey is this method
	best suited to?]
	LEAVE BLANK
	□ Self assess
	□ Declare commitment
Engagement Journey (FF)	
	□ Define problem/s
	☐ Craft question
	☐Select portfolio
	☐ Action, learning and embedding
	[which type of NZC engagement is this method most suitable for?]
	LEAVE BLANK
Type of NZC Engagement	☐ Mission City
(FF)	☐Climate City Contracts
	☐ Pilot City
	☐Twin City
	□Other
	[what democratic functions does this method help to serve?]
	☐empowering inclusion
Democratic Purpose (FF)	X collective will formation
	□collective decision making
	☐ implementation, monitoring and accountability
	[Where does this method typically sit on a spectrum of public
	participation?]
Level of Citizen	LEAVE BLANK
Empowerment (FF)	IAP2 spectrum
	<u>Arnold's Ladder</u>
	Other ideas?
	[how are the method and its outcomes usually communicated to
Communication Channels	broader publics]
Communication Channels (FF)	x Public report
	☐ Mass media
	☐ Dedicated website



□Social media
□Direct engagement with wider public
□Other [text box]

Participation	
	[how many people can usually participate]
Participant Numbers (FF)	□small groups – up to 10/15
	x up to 50
	□50-100
	□100-500
	□500-1000
	□no limit
	[what type of actors and stakeholders typically participate
	throughout the whole process]
	□ Policy/decisionmakers
	☐ Citizens or general public
	☐ Industry and innovation communities
Actors and Stakeholders (FF)	, □NGOs or civil society organisations
	□Academia
	☐Science or technology research communities
	□Organizational staff
	X Social innovators
	□Other [text box]
	[The stakeholders are either gathered together to discuss the
Actors and Stakeholder	'anatomy' of the challenge or are interviewed individually or in
Relationships (text)	groups to inform the team that visualises the challenge map.]
	[how are participants typically recruited to take part?]
	Self-selection
	□random selection
Participant Recruitment (FF)	□stratified selection
rarticipant Recruitment (11)	□election
	X invitation or appointment
	□other [text box]
	[how do people typically interact with each other during the
	process?]
	Express preferences only
	X Deliberate or discuss
Interaction between	☐ Observe as spectators
participants (FF)	□ No interaction
	☐ Negotiation and bargaining
	☐ Ask and answer questions
	□Other [text box]
	[in which formats can this method take place?]
	X online
Format (FF)	X in person
Tornat (11)	X asynchronously
	X synchronously



# **Development Stage**

	[which phase does the tool/method fit best into]
	x Analyse Context
	x Reframe Problems
	☐ Envision Alternatives
Social Innovation	□Prototype
Development Stage	□Experiment
	☐ Assess social innovation readiness
	□Scale
	□Evaluate
	[Which objective/activity does the tool/method support]
	X ecosystem analysis
	X environmental scanning
	☐ negotiation of commitments
	X stakeholder engagement
	□knowledge transfer
	☐feasibility plan
	□brainstorming
	□prototyping
Scope	☐impact assessment
	X agenda setting
	x_problem framing
	$\square$ policy legitimization / amplifying
	x policy formulation
	policy implementation
	policy evaluation
	☐ financing plan
	□ accountability plan
	□other [text box]

### **Resources**

	[what kind of resources and investments are needed to use this
	method]
	X Human Labour
Resources and Investments	x Materials
(FF and text)	☐Software or other tech
	□Funding
	□Other (please specify eg. Independent recruitment company,
	venue etc)
	[can this method be run in-house, or does it require external
	resources and actors]
In house /FF\	□Can be run internally
In-house (FF)	☐Requires input from independent or external organisers
	x Both
	□Not Applicable



# How does it work: step by step

Time commitment (text)	[An expert group could deliver the required content within half a day but the visualisation time would come on top of that (and would vary according to the level of ambition). The process might also need several iterative rounds for the map to correspond well enough with the experts' view of the challenge. eg. Some methods require a minimum amount of planning and implementation otherwise they risk being poor quality or little impact. Others can be deployed quickly.
Typical duration (FF)	x one-off  ☐ recurring ☐ continuous ☐ other [text box]
Step by Step (text)	[Work in one group or several groups that come together and do the exercise again together. List the reasons why it is important to tackle the chosen challenge. Formulate a vision where the challenge has actually been solved. Identify which barriers have to be overcome for the vision to realize. Name the 'sore points' where development is slow due to some barriers. Name the aspects of the 'cure', i.e. the leverage points where changing a specific aspect of the underlying problem will have a major impact. Visualise the outcome to get an overview – and preferably revise the draft with those who participated.]
Evaluation (text and links)	[ways/suggestions of how this method can be evaluated]
Connecting Methods (links and text)	[Connecting methods include challenge prototyping and challenge reporting. Using all these jointly would typically happen in the context of a challenge competition.]

# How does it work: case study (of this method)

Find out more about how	[link to a citizen engagement case study or social innovation case
this method has been	study that used this method]
applied in practice (link)	LEAVE BLANK FOR NOW

## Make it Your Own

Flexibility and Adaptability (text)	[There is no one-fits-all model for preparing and drawing a challenge map. The most ambitious visualisations may be close to pieces of art graphics but more simple maps are often sufficient.
(,	Being able to bring the essentials into a single 'map' or 'landscape'
	(i.e. some kind of visual image) should not be compromised.]
Existing Guidelines and Best Practice (links)	[-]



[for this option, cities will need to select what category they fall into in order to access different levels of services; clicking this should link to relevant places]

LEAVE BLANK

Mission cities [links to Tailored advisory service, for detailed support]

Pilot cities [links to expertise to design and support pilots]

Twin cities [links to information, knowledge-smart repository]

Other

## **References and Reading**

References and Further Resources (text and links)

[https://www.science-practice.com/blog/2015/01/15/challenge-mapping/

https://demoshelsinki.fi/wp-content/uploads/2018/05/demostry-out-www-1.pdf ]